

Appl. No. 09/275,097
Amdt. Dated Aug. 10, 2004-08-10
Reply to Office action of May 10, 2004

Remarks

The conditional allowance of claims 12-22 and allowance of claims 34-46 is noted with appreciation. Claim 12 has been amended to correct the word *priority* in line 5.

A period has been inserted at the end of claim 3 and the traffic rates of the connections in the release list have been amended to go from the highest to lowest bandwidth in claims 11 and 33.

It is believed these amendments take care of the Examiner's formal objections to the claims.

The Examiner's rejection with respect to claim 1 is respectfully traversed. As noted by the Examiner, Hsing discloses a network wherein failed connections are re-routed in an arbitrary manner either around the failed node, or in one embodiment by sending a re-route message back to the source of the affected connection. Hsing therefore suffers from the disadvantages noted in the introductory portion of the present application, namely that it is possible for a connection with a superior level of service to be released later in sequence than a connection that is associated with an inferior level of service.

Nishimura discloses a self-healing network wherein failed connections are re-routed around a failed link. In the event of a failed link, the nodes on either side of the failed link are designated the sender and chooser respectively. The sender broadcasts control packets to adjacent nodes. The chooser responds to receipt of the control packets by sending back return packets that result in the existing connection being re-routed around the failed node. Nishimura does not teach sending packets or messages back toward the source or destination nodes.

Nishimura does not appear to assign a priority indicator to each of the channels (connections)

Nishimura is vague with respect to the nature of the assigned priorities and does not indicate how or on what basis priority is assigned. Line 67, col. 7 merely states that "The priority field indicates the priority of a faulty channel." It appears from the wording that priority is assigned only when the channels become faulty, not to all regular channels during normal operation. This interpretation is confirmed by claim 3, which states that the "failed regular channels are assigned different levels of priority" (emphasis added). There

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is no indication in Nishimura that each of the channels (connections) is assigned a priority indicator as required by claim 1, and indeed such interpretation would be contrary to the wording of claim 3, which clearly states that priority is assigned to the failed channels (as a first step) and then the link is switched from the failed channel to the spare channel (as a second step). By only assigning priority to the failed channels, Nishimura would not address the fundamental problem of ensuring the appropriate level of service to customers.

Nishimura does not send out connection release messages in a sequence which corresponds to the priority hierarchy.

Claim 1 clearly states that in upon detection of a failure the "connection release messages are sent toward said source or destination entity in a sequence which corresponds to the priority hierarchy from the switched connection associated with the highest priority level to the connection associated with the lowest priority level".

This is clearly inconsistent with Nishimura. Upon detection of a failure Nishimura broadcasts control packets that contain a priority field relating to the failed to adjacent tandem nodes. There is no suggestion that these control packets are sent out in a sequence based on priority. As explained at col. 11, line 45 et seq., when a return packet specifying a reserved channel ID is received the top priority channel is switched to the reserved channel by rewriting the timeslot memory in the time slot interchanger. Next the return packet is sent back to the source node of the return packet. It should be noted that this is not the same as the source of the connection. Nishimura does not teach sending a connection release message back to the source in a sequence corresponding to the priority hierarchy.

A combination of Nishimura and Hsing does not result in the invention as claimed

It is respectfully submitted that it is not permissible to selectively pick and choose portions of a cited reference and combine such carefully selected portions with another reference in order to establish obviousness with the benefit of hindsight. It is not permissible to use the applicant's teachings as a blueprint for hindsight reconstruction. Hsing describes re-rerouting around a failed connection, and so does Nishimura. But if one skilled in the art were to apply the teachings of Nishimura to Hsing, such a person

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would logically be required to apply all of Nishimura's re-rerouting mechanism, not merely a selected part of it. Nishimura clearly teaches that in the event of control failure control packets are broadcast to each of the adjacent tandem nodes so as to find an alternative path to the node on the other side of the failed link. There is no teaching of propagating release messages to the source or destination as the case may be, and certainly no teaching of propagating such messages in a priority sequence. Thus, if one combined the teaching of Nishimura as it relates to re-rerouting, and substituted such teachings for the teachings of Hsing in relation to re-routing, the result would not be an arrangement wherein connection release messages were propagated toward the source or destination nodes in the event of a link failure as claimed. The result would be an arrangement wherein control packets were sent to adjacent tandem nodes and on receipt of return packets the affected portion of the connection was re-routed in accordance with the teachings of Nishimura. In accordance with the teachings of Nishimura there would be no motivation to propagate connection release messages back to the source or destination in a sequence based on priority since Nishimura deals solely with re-routing an existing connection around a failed link or node.

Furthermore, since Nishimura is silent as to the purpose and nature of the priority assignment, there is no motivation derivable from Nishimura for selecting only the priority assignment aspect of his teaching.

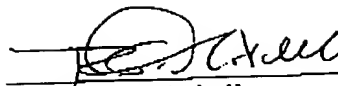
The use of priority assignment *per se* is known, but in the applicant's respectful submission the prior art does not show, either alone or in combination, a connection release scheme as defined in claim 1, wherein the ordered release of connections in the event of node failure takes place on the basis of pre-assigned priorities as a result of connection release messages being sent in priority sequence to source or destination nodes.

Similar arguments apply to apparatus claim 23, which is essentially the apparatus counterpart of method claim 1.

It is believed that this application is in condition for allowance. Accordingly, reconsideration and allowance are respectfully requested.

Respectfully submitted,

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